

Any Dkt. No.: IRVN 0011DIV
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LISTING OF THE CLAIMS

No claims are amended herein. The claims are provided below for the Examiner's convenience.

1. - 30. (Canceled)

31. *(Previously presented)* A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:

- a) a human cell expressing a cytokine from a recombinant polynucleotide; and
- b) a pharmaceutical excipient;

wherein the cytokine is stably associated in the cell outer membrane, and
wherein the cell has been inactivated to prevent proliferation.

32. *(Previously presented)* The composition of claim 31, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.

33. *(Previously added)* The composition of claim 31, wherein the cell is a cancer cell.

34. *(Previously presented)* The composition of claim 31, wherein the cell is from a tumor of the same tissue type as a tumor in the human.

35. *(Previously presented)* The composition of claim 34, wherein the tumor is an ovarian cancer or a brain cancer.

36. *(Previously presented)* The composition of claim 31, wherein the cell is allogeneic to the human.

37. *(Previously presented)* The composition of claim 31, wherein the cell is histocompatibly identical to the subject human.

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38. *(Previously presented)* The composition of claim 31, further comprising a tumor-associated antigen, wherein the combination of the cytokine and the tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.
39. *(Previously presented)* The composition of claim 38, wherein the tumor-associated antigen is obtained from a cell autologous to the human.
40. *(Previously added)* The composition of claim 38, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.
41. *(Previously presented)* The composition of claim 38, comprising a combination of:
a) the cell expressing the membrane-associated cytokine; and
b) a tumor cell autologous to the human;
wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.
42. *(Previously presented)* The composition of claim 41, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the human.
43. *(Previously added)* The composition of claim 41, wherein the tumor cell is a glioma, a glioblastoma, a gliosarcoma, an astrocytoma, or an ovarian cancer cell.
44. *(Previously presented)* The composition of claim 41, wherein the tumor cell has been inactivated by irradiation.
45. *(Previously presented)* The composition of claim 31, wherein the cell expressing the membrane-associated cytokine has been inactivated by irradiation.

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46. *(Previously added)* The composition of claim 31, wherein the cell produces a secreted cytokine in addition to the cytokine stably associated in the outer membrane.
47. *(Previously added)* The composition of claim 31, wherein a majority of the cytokine produced by the cell is present on the outer membrane of the cell.
48. *(Previously presented)* The composition of claim 38, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.
49. *(Previously presented)* A composition comprising a tumor associated antigen and a population of cells expressing a transmembrane cytokine ,
wherein the cells have been inactivated to prevent proliferation, and
wherein the composition is effective in stimulating an immune response to the tumor associated antigen.
50. *(Previously presented)* A unit dose of the composition according to claim 31, wherein the number of cells in the composition is at least about 5×10^6 but not more than about 2×10^8 .
51. *(Canceled)*
52. *(Previously added)* The composition of claim 31, wherein the cytokine naturally occurs as a membrane cytokine.
53. *(Previously added)* The composition of claim 31, wherein the cytokine is a fusion protein comprising a heterologous transmembrane region.
54. *(Previously added)* The composition of claim 31, wherein the cell has been transduced with a retroviral expression vector, or is the progeny of such a cell.

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55. *(Previously added)* A method for producing the composition of claim 31, comprising transducing the cell with an expression vector encoding the membrane-associated cytokine.
56. *(Previously added)* The method of claim 55, wherein the expression vector is a retroviral vector.
57. *(Previously presented)* The method of claim 55, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.
58. *(Previously added)* The method of claim 55, wherein the cytokine is expressed under control of a cytomegalovirus (CMV) promoter.
59. *(Previously presented)* The method of claim 55, wherein the cell is from a cancer of the same tissue type as a tumor in the human.
60. *(Previously presented)* The method of claim 55, wherein the cell is allogeneic to the human.
61. *(Previously presented)* The method of claim 55, wherein the cell is histocompatibly identical to the human.
62. *(Previously added)* A method for producing the composition of claim 38, comprising transducing a cell with an expression vector encoding the membrane-associated cytokine, and providing the transduced cell in combination with the tumor-associated antigen.
63. *(Previously presented)* The method of claim 55, further comprising inactivating the cell to prevent proliferation.
64. *(Previously presented)* The method of claim 55, further comprising irradiating the cell.

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65. *(Previously presented)* The composition of claim 31, wherein the cytokine is IL-4.
66. *(Previously presented)* The composition of claim 31, wherein the cytokine is GM-CSF.
67. *(Previously presented)* The composition of claim 31, wherein the cytokine is M-CSF.
68. *(Previously presented)* A pharmaceutical composition effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:
a) a human cell expressing a cytokine from a recombinant polynucleotide; and
b) a pharmaceutical excipient;
wherein the cytokine is stably associated in the cell outer membrane, and
wherein the composition has been formulated for administration to an allogeneic human subject.
69. *(Previously presented)* The composition of claim 68, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.
70. *(Previously presented)* The composition of claim 68, wherein the cell is a cancer cell.
71. *(Previously presented)* The composition of claim 68, wherein the cell is from a tumor of the same tissue type as a tumor in the human.
72. *(Previously presented)* The composition of claim 68, further comprising a tumor-associated antigen, wherein the combination of the cytokine and the tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.
73. *(Previously presented)* The composition of claim 72, wherein the tumor-associated antigen is obtained from a cell autologous to the human.

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74. *(Previously presented)* The composition of claim 72, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.
75. *(Previously presented)* The composition of claim 72, comprising a combination of:
a) the cell expressing the membrane-associated cytokine; and
b) a tumor cell autologous to the human;
wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.
76. *(Previously presented)* The composition of claim 75, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the human.
77. *(Previously presented)* The composition of claim 68, wherein the cell expressing the membrane-associated cytokine has been inactivated by irradiation.
78. *(Previously presented)* A method for producing the composition of claim 68, comprising transducing the cell with an expression vector encoding the membrane-associated cytokine.
79. *(Previously presented)* The method of claim 78, wherein the expression vector is a retroviral vector.
80. *(Previously presented)* The method of claim 78, further comprising inactivating the cell to prevent proliferation.
81. *(Previously presented)* The method of claim 78, further comprising inactivating the cell.